

CLAIMS

1. A device for sensing seismic and/or acoustic vibrations, comprising a body of a particulate material composed of a plurality of individual particles; and means for determining changes in electrical conductivity of the particulate material caused by seismic and acoustic vibrations.

2. A device as defined in claim 1, wherein said particles of said particulate material are electrically conductive.

3. A device as defined in claim 2, wherein said particles of said particulate material are composed of an electrically conductive material.

4. A device as defined in claim 2, wherein said particles are composed of a material which is not electrically conductive and is treated with an electrically conductive substance.

5. A device as defined in claim 2, wherein said particles are composed of a material which is electrically conductive and is treated with a substance of higher electric conductivity.

6. A device as defined in claim 1; and further comprising a casing which encloses said body of particulate material.

7. A device as defined in claim 5, wherein said casing is composed of a non electrically conductive material.

8. A device as defined in claim 5, wherein said casing has a plurality of ventilating openings.

9. A device as defined in claim 5, wherein said casing is flexible.

10. A device as defined in claim 1, wherein said means include at least two electrodes arranged in contact with said body of particulate material and spaced from one another, and means for determining voltage changes between said electrodes.

11. A device as defined in claim 9, wherein said electrodes have a height substantially corresponding to a height of said body of particulate material and a width substantially corresponding to a width of said body of said particulate material.

12. A device as defined in claim 11, wherein each of said electrodes is composed of a plurality of electrode parts electrically connected with one another.

13. A device as defined in claim 9, wherein said means further include a voltage source.

14. A device as defined in claim 12, wherein said means further include an amplifier, an analog-digital converter and a microcontroller.

15. A system for determining seismic and/or acoustic vibrations, comprising at least one body of a particulate material composed of a plurality of individual particles; and means for determining changes in electrical conductivity of the particulate material caused by seismic and acoustic vibrations.

16. A system as defined in claim 14; and further comprising at least another body of a particulate material composed of a plurality of individual particles; and means for determining changes in electrical conductivity of the particulate material caused by seismic and acoustic vibrations, said body of said particulate material being spaced from one another.